

ABSTRACT OF THE DISCLOSURE

[117] An approach is provided for adapting multicast services originating from a terrestrial network over a satellite network. A request for establishing a multicast session corresponding to a network address of the terrestrial network is received at a hub station. The request specifies participating satellite terminals in the multicast session. The hub station assigns an address unique within the satellite network to map to the network address for the multicast session. The participating satellite terminals are configured with the assigned satellite address. A distribution mechanism is selected to transport dataflow of the multicast session to the participating satellite terminals. The distribution mechanism utilizes one or more spot beams covering the participating satellite terminals, wherein the selected distribution mechanism is switched to another one of the distribution mechanisms based on capacity of the satellite network and reachability of the participating satellite terminals.